



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,219	10/19/2005	Kenneth Michlitsch	17601.15a.1	8323
57360 7590 04/14/2009 WORKMAN NYDEGGER 1000 EAGLE GATE TOWER, 60 EAST SOUTH TEMPLE SALT LAKE CITY, UT 84111				
EXAMINER ANDERSON, GREGORY A				
ART UNIT		PAPER NUMBER		
3773				
MAIL DATE		DELIVERY MODE		
04/14/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/523,219

Applicant(s)

MICHLITSCH, KENNETH

Examiner

GREGORY A. ANDERSON

Art Unit

3773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21, 22, 24-26 and 31-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21, 22, 24-26 and 31-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 20 January 2009 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "having common distal ends" is unclear and renders the claim indefinite. There are various definitions of the term "common" and when used in the manner as claimed it is unclear which definition is intended.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 21, 22, 24, 31-33, 36 and 41-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gershony et al. 5,626,601.

Gershony et al. discloses a device comprising: a housing comprising an outer tube 61 and an inner tube 86 having common distal ends (the distal ends of both tubes are in the same location and thus are common), the inner tube having a lumen 80 and a plurality of lateral openings 81 in fluid communication with the outer tube, the lumen configured to receive a volume of blood and a blood coagulating agent to form the autologous plug; and a closure element 71. Gershony et al. further discloses the housing comprising a second lumen (lumen of introducer 61) defined by an annular interstice between the outer tube and the inner tube, the second lumen being in fluid communication with the lumen of the inner tube. Gershony et al. further discloses the autologous plug formed in the lumen having a length and a form factor that causes the autologous plug to engage tissue surrounding the puncture tract after extrusion of the plug into the puncture tract (Abstract). Gershony et al. further discloses the blood coagulating agent being pre-disposed within the lumen, coated onto an interior surface of the lumen, and being introduced through the plurality of openings (Col. 2 ll. 29-39). Gershony et al. further discloses the blood coagulating agent being thrombin (Col. 6 ll. 13-18). Gershony et al. further discloses the port 79 being an injectate port through which the coagulant is injected into the system. Gershony et al. further discloses the inner tube being fixed relative to the outer tube (Fig. 5, the inner tube is fixed laterally relative to the outer tube). Gershony et al. further discloses the inner tube being

disposed within the outer tube (Fig. 5). Gershony et al. further discloses the closure element being at least partially within the inner tube (Fig. 12). Gershony et al. further discloses a port 98 in the housing that is in fluid communication with the second lumen. Gershony et al. further discloses the lateral opening being disposed through and along the axial length of the inner tube (Fig. 12).

However, Gershony et al. does not disclose the a plunger disposed within the lumen.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Gershony et al. by connecting a syringe to the injectate port of Gershony et al., the syringe including a plunger, in order to inject the congealing agent through the lateral openings.

6. Claims 21, 25, 26, and 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhu 20020072767 in view of Kensey et al. 5,545,178.

Zhu discloses a device comprising: a housing comprising an outer tube 72 and an inner tube 86, having common distal ends (the distal ends of both tubes are in the same location and are thus common), the inner tube having a lumen and a plurality of lateral openings 92 in fluid communication with the outer tube, the lumen being configured to receive a volume of blood and a blood congealing agent (p. [0062]) to form the autologous plug (Fig. 6); and a plunger disposed for translation within the lumen to extrude the autologous plug formed within the lumen (Fig. 9). Zhu further discloses the blood congealing agent comprising a matrix 80 consisting of

biocompatible foam and comprising at least one channel therethrough (p. [0062], Fig. 6).

However, Zhu does not disclose a closure element configured to be inserted from the housing into the puncture tract and to isolate the volume of blood mixed with the blood coagulating agent from the vessel during formation of the autologous plug from the volume of blood by action of the blood coagulating agent, the closure agent comprising a pledget and thread and the thread or pledget being biodegradable.

Kensey et al. discloses a closure element 38 configured to be inserted from the housing into the puncture tract and to isolate the volume of blood mixed with the blood coagulating agent from the vessel during formation of the autologous plug from the volume of blood by action of the blood coagulating agent, the closure agent comprising a pledget 38 and thread 42 and the thread or pledget being biodegradable (Col. 8 l. 60, Col. 9 l. 35).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Zhu with the pledget and thread of Kensey et al. in order to block the opening as taught by Kensey et al. (Col. 5 ll. 47-49).

7. Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhu in view of Kensey et al. and further in view of Greenhalgh 6,391,037.

Zhu in view of Kensey et al. discloses the invention essentially as claimed as discussed in claim 21 above.

However, Zhu in view of Kensey et al. does not disclose the blood coagulating agent comprising a platinum or thermo-resistive wire.

Greenhalgh discloses a platinum and thermo-resistive wire to clot blood (Col. 1 l. 52).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Zhu in view of Kensey et al. with the wire of Greenhalgh in order to promote blood clotting.

Response to Arguments

8. Applicant's arguments with respect to claims 21, 22, 24-26 and 31-45 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREGORY A. ANDERSON whose telephone number is (571)270-3083. The examiner can normally be reached on Mon-Thurs 9:30am-3:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jackie Ho can be reached on (571) 272-4696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory A Anderson/

/(Jackie) Tan-Uyen T. Ho/
Supervisory Patent Examiner, Art Unit 3773